

WHAT IS CLAIMED IS:

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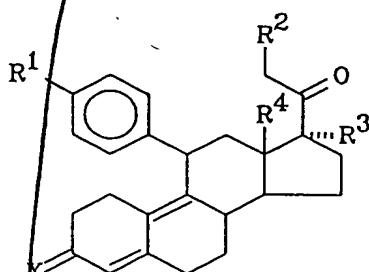
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1. A compound having the formula



in which:

R¹ is a member selected from the group consisting of —OCH₃, —SCH₃, —N(CH₃)₂, —NHCH₃, —CHO, —COCH₃ and —CHOHCH₃;

R² is a member selected from the group consisting of halogen, alkyl, acyl, hydroxy, alkoxy, acyloxy, alkylcarbonate, (cypionyloxy), S-alkyl and S-acyl;

R³ is a member selected from the group consisting of alkyl, hydroxy, alkoxy and acyloxy;

R⁴ is a member selected from the group consisting of hydrogen and alkyl; and

X is a member selected from the group consisting of =O and

=N—OR⁵, wherein R⁵ is a member selected from the group

consisting of hydrogen and alkyl.

2. A compound in accordance with claim 1 in which:

R¹ is —N(CH₃)₂.

3. A compound in accordance with claim 1 in which:

R² is halogen.

1 4. A compound in accordance with claim 1 in which:
2 R² is alkoxy.

1 5. A compound in accordance with claim 1 in which:
2 R³ is acyloxy.

1 6. A compound in accordance with claim 1 in which:
2 R⁴ is alkyl.

1 7. A compound in accordance with claim 1 in which:
2 X is =0 .

1 8. A compound in accordance with claim 1 in which:
2 X is =N—OR⁵ .

1 9. A compound in accordance with claim 1 in which:
2 R¹ is —N(CH₃)₂;
3 R² is halogen;
4 R³ is acyloxy;
5 R⁴ is alkyl; and
6 X is =0 .

1 10. A compound in accordance with claim 9 in which:
2 R² is F.

1 11. A compound in accordance with claim 9 in which:
2 R² is Br.

1 12. A compound in accordance with claim 9 in which:
2 R² is Cl.

1 13. A compound in accordance with claim 9 in which:
2 R⁴ is methyl.

1 14. A compound in accordance with claim 1 in which:
2 R¹ is —N(CH₃)₂;
3 R² is alkyl;
4 R³ is acyloxy;
5 R⁴ is alkyl; and
6 X is =O .

1 15. A compound in accordance with claim 1 in which:
2 R¹ is —N(CH₃)₂;
3 R² is alkoxy;
4 R³ is acyloxy;
5 R⁴ is alkyl; and
6 X is =O .

1 16. A compound in accordance with claim 15 in which:
2 R² is methoxy.

1 17. A compound in accordance with claim 15 in which:
2 R² is ethoxy.

1 18. A compound in accordance with claim 15 in which:
2 R³ is acetoxy.

1 19. A compound in accordance with claim 1 in which:
2 R¹ is —N(CH₃)₂;
3 R² is hydroxy;
4 R³ is acyloxy;

5 R⁴ is alkyl; and

6 X is =0 .

1 20. A compound in accordance with claim 1 in which:

2 R¹ is —N(CH₃)₂;

3 R² and R³ are both acyloxy;

4 R⁴ is alkyl; and

5 X is =0 .

1 21. A compound in accordance with claim 20 in which:

2 R² and R³ are both acetoxy.

1 22. A compound in accordance with claim 1 in which:

2 R¹ is —N(CH₃)₂;

3 R² is S-acyl;

4 R³ is a member selected from the group consisting of hydroxy and
 acyloxy;

5 R⁴ is alkyl; and

6 X is =0 .

1 23. A compound in accordance with claim 1 in which:

2 R¹ is —N(CH₃)₂;

3 R² is cypionyloxy;

4 R³ is acetoxy;

5 R⁴ is alkyl; and

6 X is =0 .

1 24. A compound in accordance with claim 1 in which:

2 R¹ is —N(CH₃)₂;

3 R² is methoxy;

4 R³ is acetoxy;

5 R⁴ is alkyl; and

6 X is = N—OR⁵

1 N 25. A compound in accordance with claim 1 in which:

2 R¹ is —N(CH₃)₂;

3 R² and R³ are both acetoxy;

4 R⁴ is alkyl; and

5 X is = N—OR⁵

1 N 26. A pharmaceutical composition comprising an effective amount of
2 a compound of claim 1 and a pharmaceutically acceptable excipient.

1 N 27. A method of producing an antiprogestational effect in a patient,
2 said method comprising administering to said patient an effective amount of a compound
3 of claim 1.

1 N 28. A method of inducing menses in a patient, said method
2 comprising administering to said patient an effective amount of a compound of claim 1.

1 N 29. A method of treating endometriosis, said method comprising
2 administering to said patient an effective amount of a compound of claim 1.

1 N 30. A method of treating dysmenorrhea, said method comprising
2 administering to said patient an effective amount of a compound of claim 1.

1 N 31. A method of treating endocrine hormone-dependent tumors, said
2 method comprising administering to said patient an effective amount of a compound of
3 claim 1.

1 N 32. A method of treating uterine fibroids in a patient, said method
2 comprising administering to said patient an effective amount of a compound of claim 1.

1 N 33. A method of inhibiting uterine endometrial proliferation in a
2 patient, said method comprising administering to said patient an effective amount of a
3 compound of claim 1.

1 N 34. A method of inducing labor, said method comprising
2 administering to a patient an effective amount of a compound of claim 1.

1 N 35. A method of contraception, said method comprising administering
2 to a patient an effective amount of a compound of claim 1.

1 N 36. A method of postcoital contraception, said method comprising
2 administering to a patient an effective amount of a compound of claim 1.